

What is claimed is:

1. A method comprising:
 - identifying a data source;
 - mapping a plurality of data elements from the data source to a multi-dimensional cube;
 - transforming the multi-dimensional cube into a test recordset to determine if the plurality of data elements are mapped correctly;
 - saving the mapping information to a template; and
 - generating a final recordset from the data source using the template.
- 10 2. The method of claim 1, further comprising:
 - using at least part of the final recordset in an application.
3. The method of claim 2, wherein the application is a digital dashboard with multiple content windows and at least part of the final recordset is displayed in one of the content windows.
- 15 4. The method of claim 1, wherein the data source is an HTML document.
5. The method of claim 4, wherein the HTML document has a static layout.
- 20 6. The method of claim 4, wherein the HTML document has a dynamic layout that can change.

7. The method of claim 4, wherein the HTML document is a report.
8. The method of claim 1, wherein the data source is a report.
- 5 9. The method of claim 1, wherein the mapping step includes specifying at least one rule that is applied to the data elements to generate the multi-dimensional cube.
10. The method of claim 1, wherein the mapping step includes:
 - creating at least one dimension;
 - 10 creating at least one level for each dimension;
 - adding a first set of values to a selected one of the at least one level for each dimension;
 - creating at least one measure; and
 - adding a second set of values to the at least one measure.
- 15 11. The method of claim 10, wherein the selected one of the at least one level is a lowest level.
12. The method of claim 10, wherein the first set of values and the second set of 20 values have at least some overlapping values.

13. The method of claim 1, wherein the transforming and generating steps each include:

determining a plurality of intersections in a plurality of dimension trees in the multi-dimensional cube; and

5 building the respective test or final recordset from the intersections.

14. The method of claim 13, wherein the intersections are determined by overlapping positions of the data elements in the multi-dimensional cube.

10 15. The method of claim 13, wherein the determining step includes:

selecting a dimension tree of the plurality of dimension trees to use as a main tree; and

using the main tree as a driving force to determine the plurality of intersections.

16. The method of claim 1, wherein the transforming step and generating step are
15 the same step and are performed after the saving step.

17. A method comprising:

identifying a data source;

mapping a plurality of data elements from the data source to a multi-dimensional cube

20 by creating at least one dimension, creating at least one level for each dimension, adding a first set of values to a selected one of the at least one level for each dimension, creating at least one measure, and adding a second set of values to the at least one measure;

transforming the multi-dimensional cube into a test recordset by determining a plurality of intersections in a plurality of dimension trees in the multi-dimensional cube and building the test recordset from the intersections;

saving the mapping information to a template;

5 generating a final recordset from the data source using the template by determining a plurality of intersections in the plurality of dimension trees in the multi-dimensional cube and building the final recordset from the intersections; and

using at least part of the final recordset in an application.

10 18. The method of claim 17, wherein the data source is an HTML document.

19. The method of claim 18, wherein the HTML document has a static layout.

20. The method of claim 18, wherein the HTML document has a dynamic layout
15 that can change.

21. The method of claim 18, wherein the HTML document is a report.

22. The method of claim 17, wherein the data source is a report.

20 23. The method of claim 17, wherein the selected one of the at least one level is a lowest level.

24. The method of claim 17, wherein the intersections are determined by overlapping positions of the data elements in the multi-dimensional cube.

5 25. The method of claim 17, wherein the application is a digital dashboard with multiple content windows and at least part of the final recordset is displayed in one of the content windows.

10 26. The method of claim 17, wherein the transforming step and generating step are the same step and are performed after the saving step.

27. A system comprising:
one or more servers;
one or more conversion tools coupled to the one or more servers over a network;
15 one or more client computers coupled to the server over a network;
wherein said one or more conversion tools are operable to map a plurality of data elements from a data source to a multi-dimensional cube, transform the multi-dimensional cube into a test recordset to determine if the plurality of data elements are mapped correctly, and save the mapping information to a template that is accessible by the one or more servers;
20 and

wherein one or more of said servers contain business logic that is operable to obtain a final recordset from the data source using the template and to send at least part of the final recordset to a user interface for display.

5 28. The system of claim 27, wherein at least one of the one or more client computers is operable to receive at least part of the final recordset from the server and display at least part of the final recordset in the user interface.

10 29. The system of claim 28, wherein the at least one client computer is further operable to display the user interface in a digital dashboard format with multiple content windows and at least part of the final recordset being displayed in one of the content windows.

15 30. The system of claim 27, wherein at least one of the one or more client computers contains a user interface for the conversion tool.

20 31. The system of claim 30, wherein the at least one client computer containing the conversion tool user interface is operable to allow a user to map the plurality of data elements from the data source to the multi-dimensional cube by creating at least one dimension, creating at least one level for each dimension, adding a first set of values to a selected one of the at least one level for each dimension, creating at least one measure, and adding a second set of values to the at least one measure.

32. The system of claim 30, wherein the at least one client computer containing the conversion tool user interface is operable to allow a user to map the plurality of data elements from the data source to the multi-dimensional cube by creating at least one dimension, by
5 creating for each dimensions at least one level with a corresponding level rule, and by creating at least one measure having a corresponding measure rule; and wherein one or more of said servers further contains business logic that is operable to generate the final recordset dynamically by applying the level rules and measure rules to the data source.

10 33. The system of claim 30, wherein the at least one client computer containing the conversion tool user interface is operable to transform the multi-dimensional cube into the test recordset by determining a plurality of intersections in a plurality of dimension trees in the multi-dimensional cube and building the test recordset from the intersections.

15 34. The system of claim 27, wherein the one or more servers are operable to obtain the final recordset from the data source using the template by determining a plurality of intersections in a plurality of dimension trees in the multi-dimensional cube and building the final recordset from the intersections.

20 35. An apparatus, comprising: a device encoded with logic executable by one or more processors to: map a plurality of data elements from a data source to a multi-dimensional cube, transform the multi-dimensional cube into a test recordset, and save the

mapping information to a template that allows the recordset to be generated and sent to other applications upon request.

36. The apparatus of claim 35, wherein the device includes a removable memory
5 device carrying a number of processor executable instructions to define the logic.

37. The apparatus of claim 36, wherein the removable memory device includes a disk.

10 38. The apparatus of claim 35, wherein the device is in the form of one or more parts of a computer network carrying one or more signals encoding the logic.